

Patented Dec 10, 1996

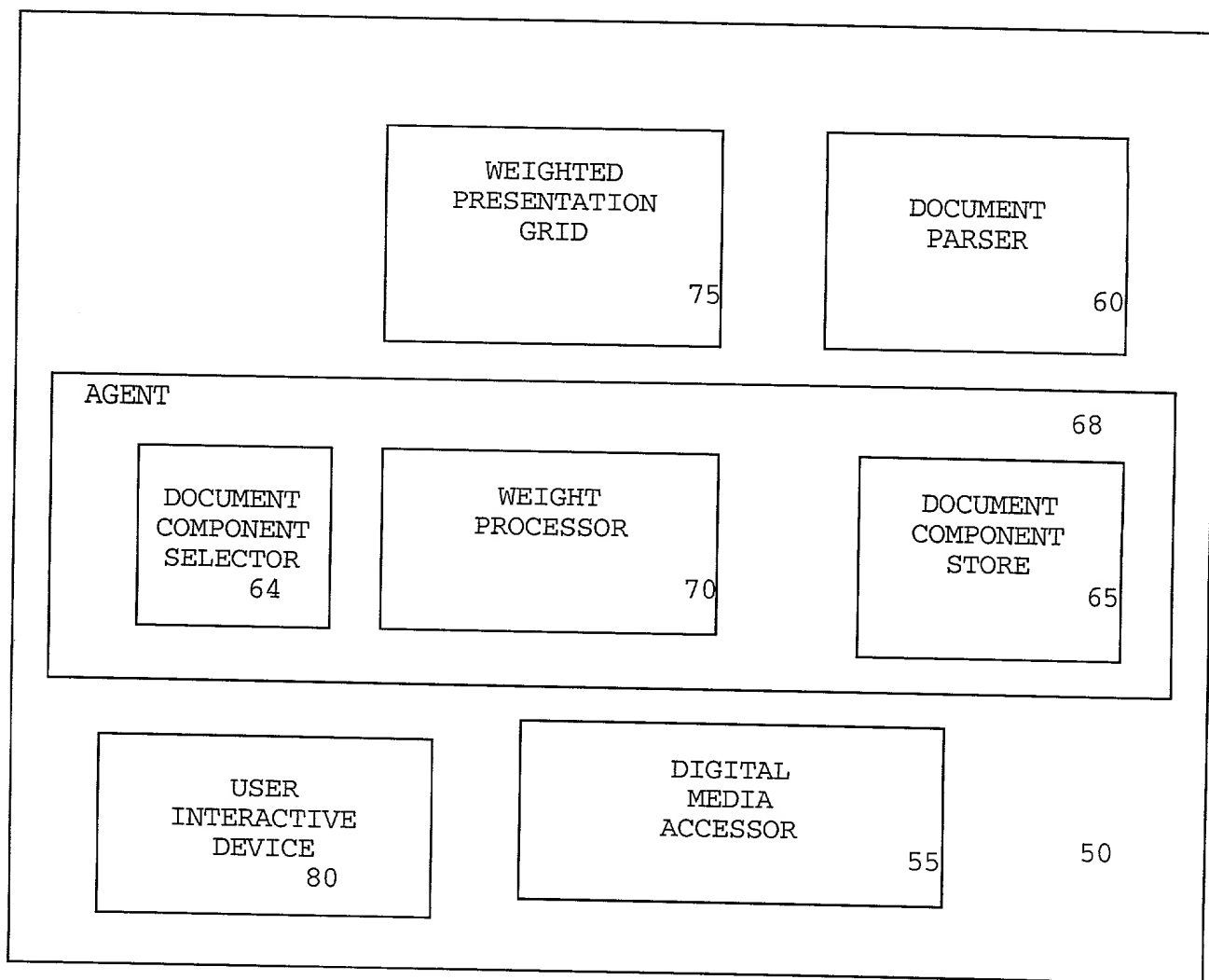


FIG. 1

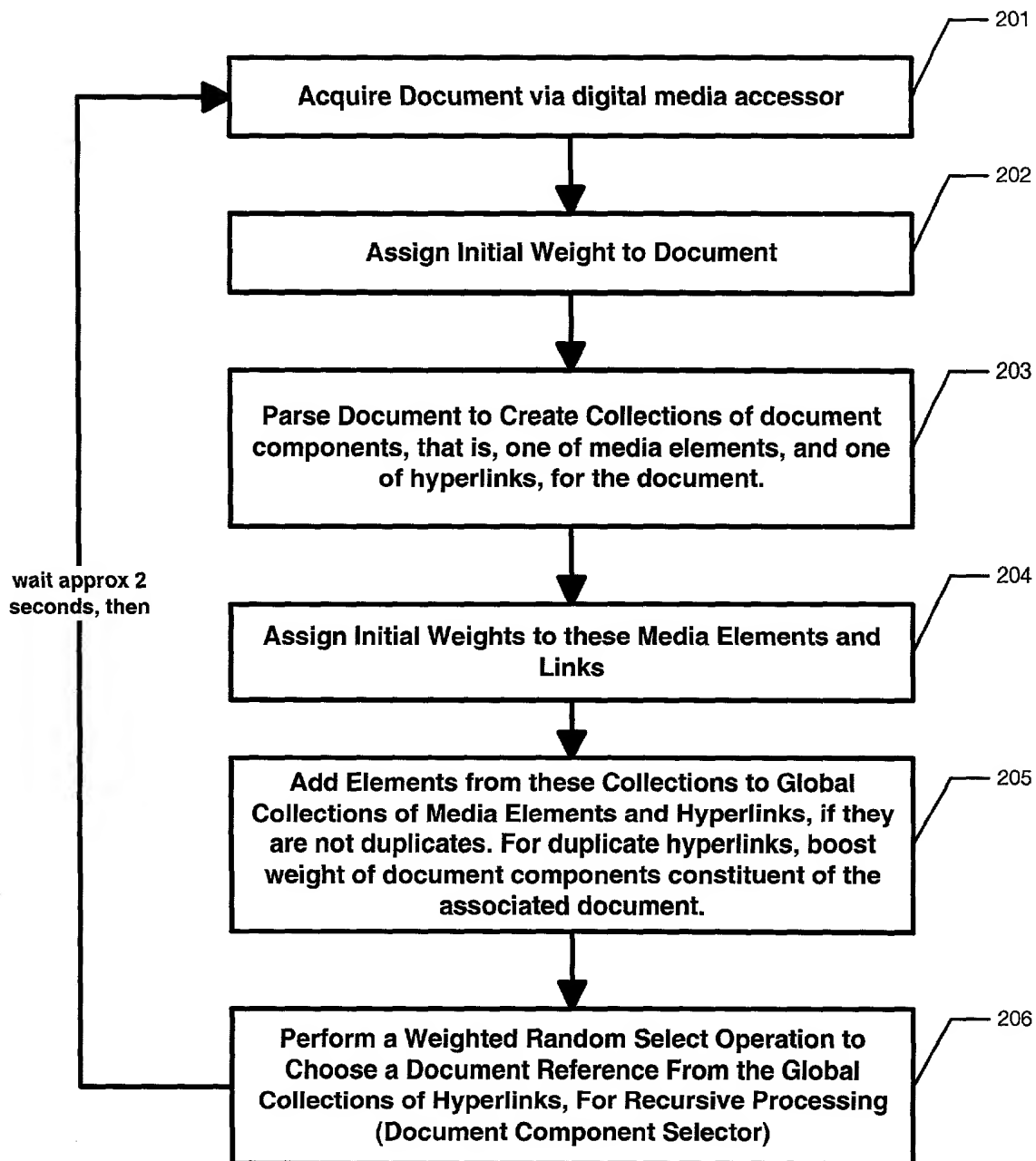


FIG 2. Break Documents Down into Document Components, and Select Document References for Further Processing

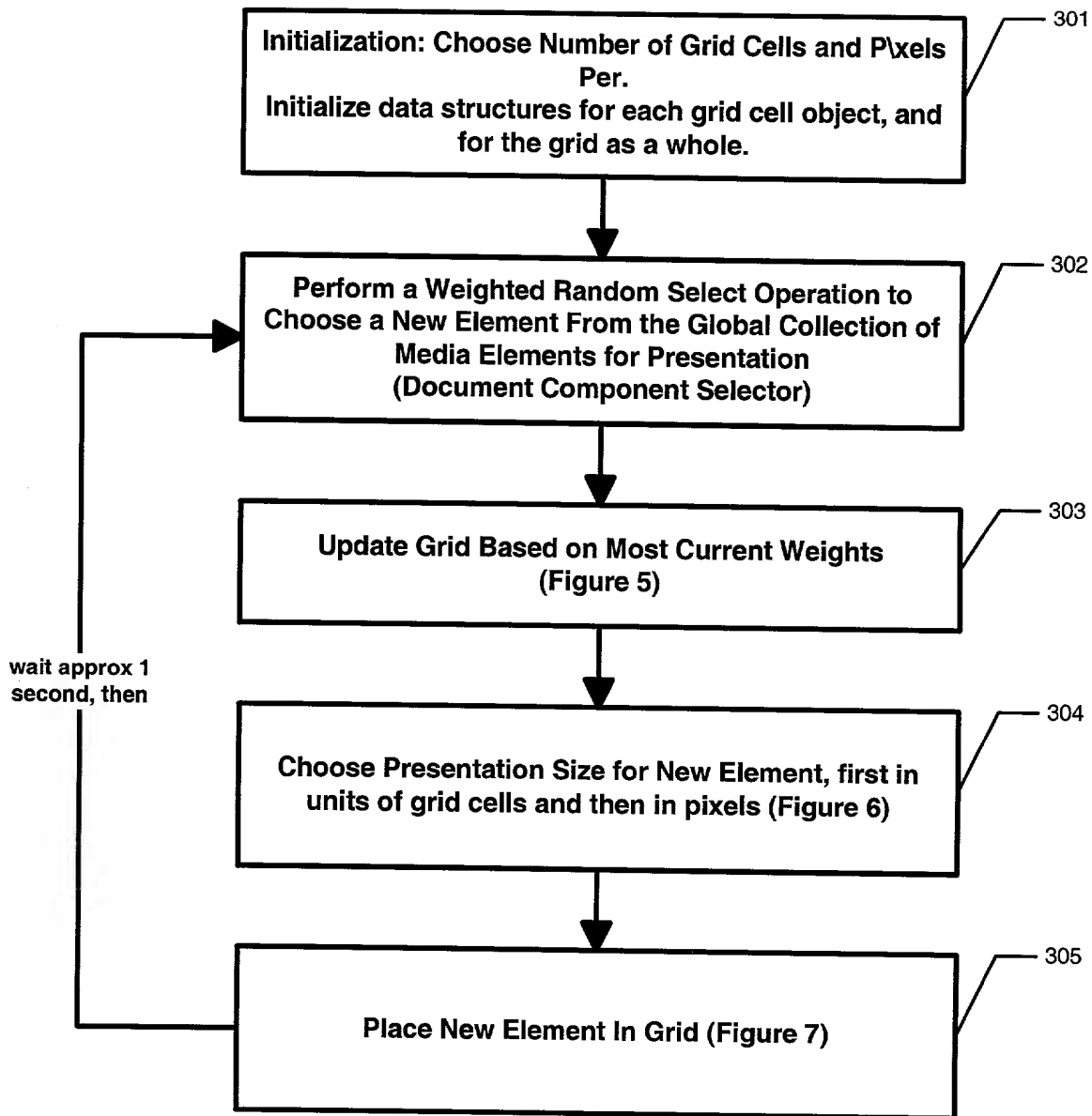


FIG 3. Weighted Grid Presentation Grid Overview

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graph TD; 401[Heuristics to Choose Number of Grid Cells and permitted range of sizes in x and y.] --> 402[Calculate pixels per cell (width and height).]; 402 --> 403[Create DLL for Media Elements in Grid, and Array.]; 403 --> 404[Create a grid cell object for each.]; 404 --> 405[Reference each grid cell object in a 2-D array for spatial access.]; 405 --> 406[Reference each grid cell object in a 1-D array for weighted random select.];
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400

401 Heuristics to Choose Number of Grid Cells and permitted range of sizes in x and y.

402 Calculate pixels per cell (width and height).

403 Create DLL for Media Elements in Grid, and Array.

404 Create a grid cell object for each.

405 Reference each grid cell object in a 2-D array for spatial access.

406 Reference each grid cell object in a 1-D array for weighted random select.

FIG 4. Initialization of the Weighted Presentation Grid

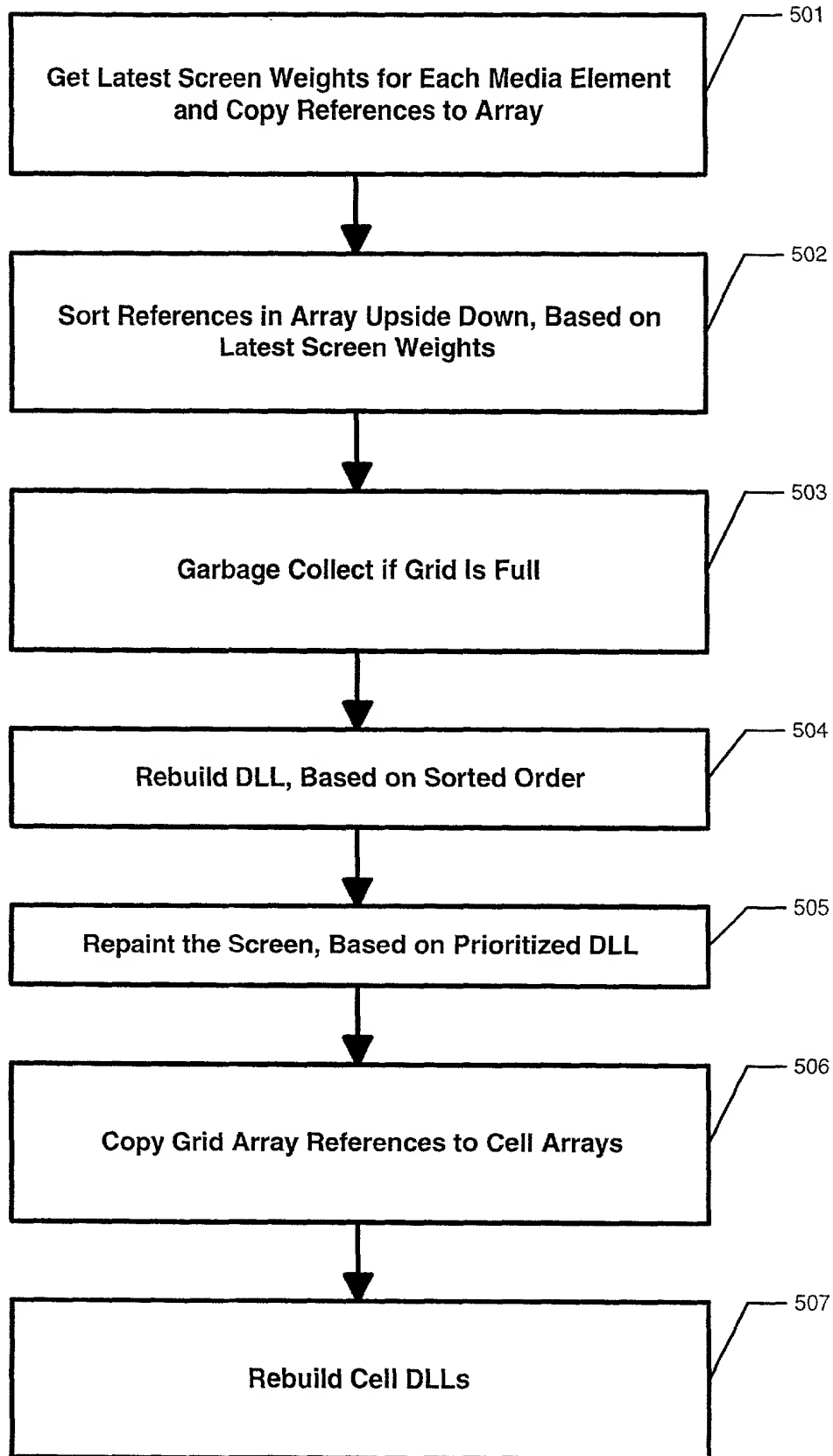


FIG 5. Update Weighted Grid

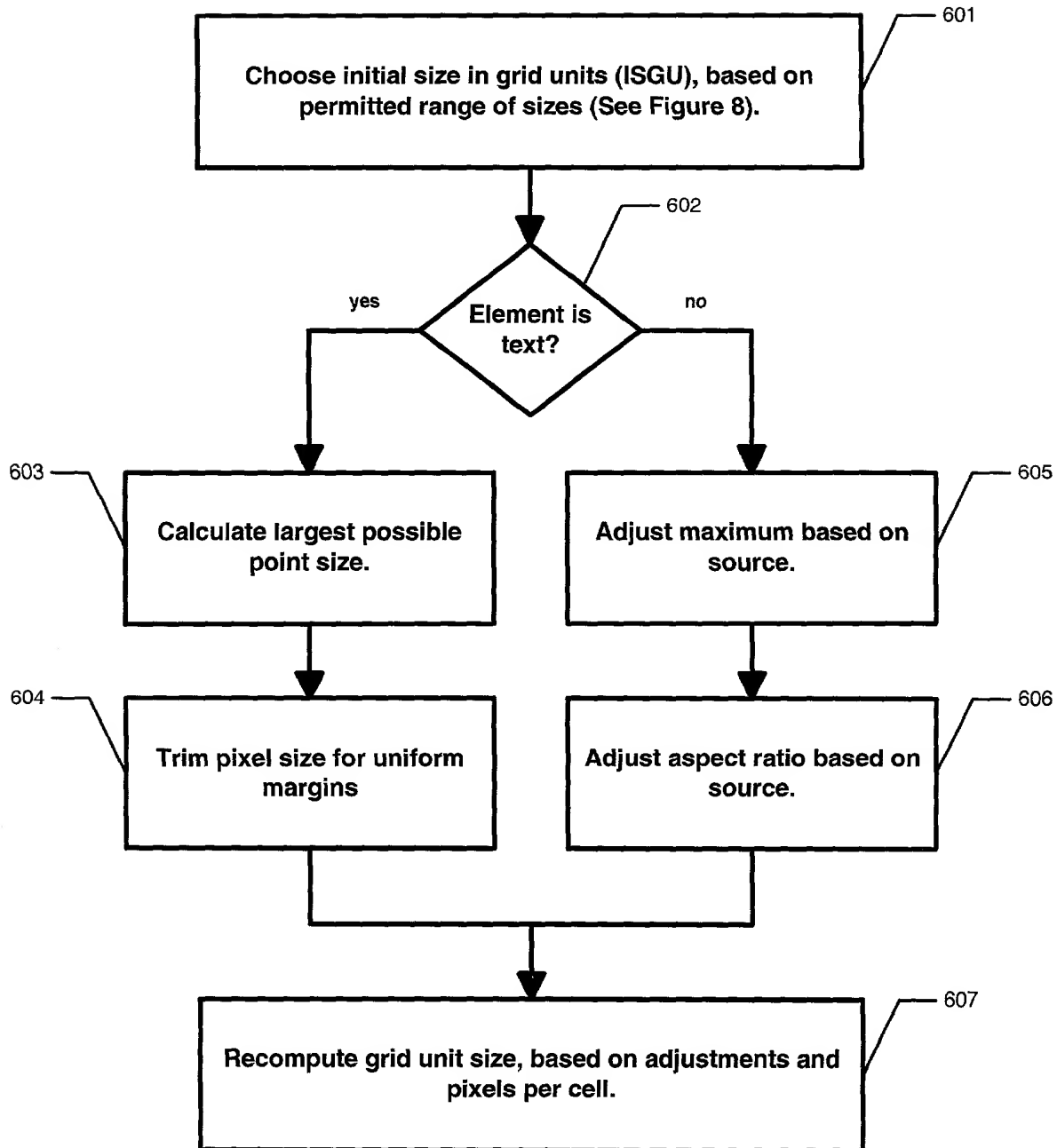


FIG 6. Choose Presentation Size of Element to be Added

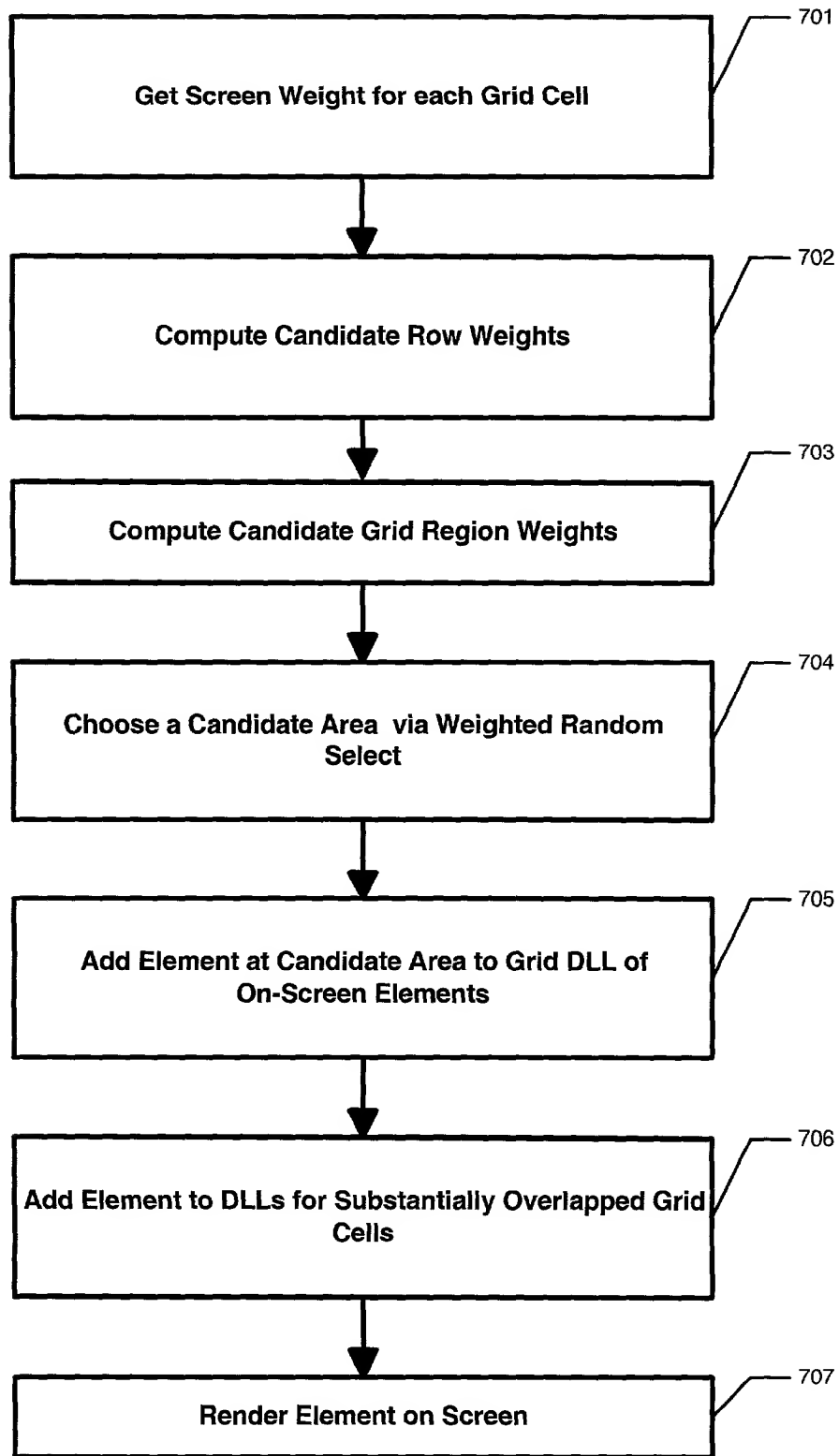


FIG 7. Place New Element in Grid

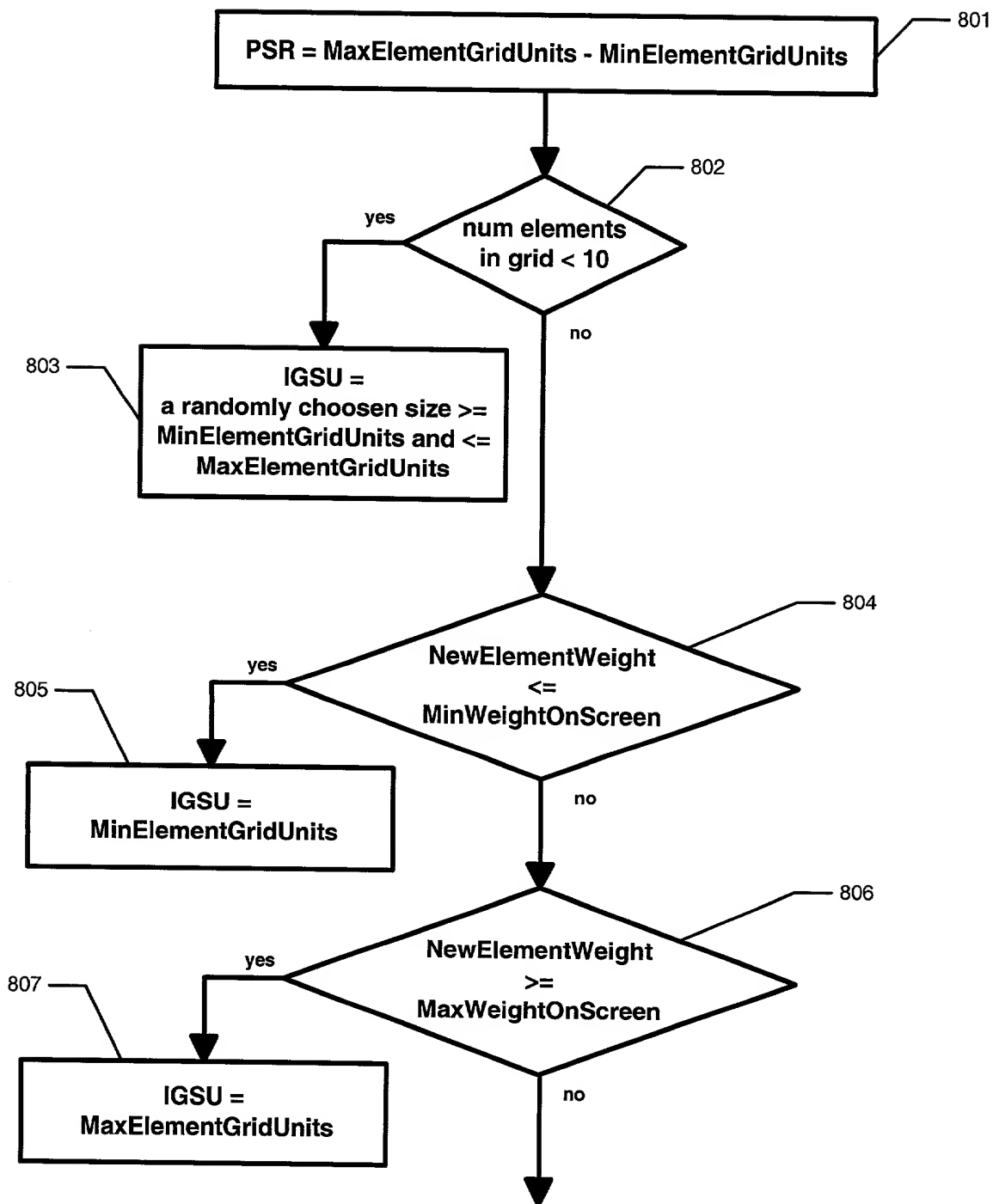


FIG 8A Adaptive Algorithm to Choose the Initial Size in Grid Units (IGSU) for a New Element to be Place in the Collage Visualization Grid



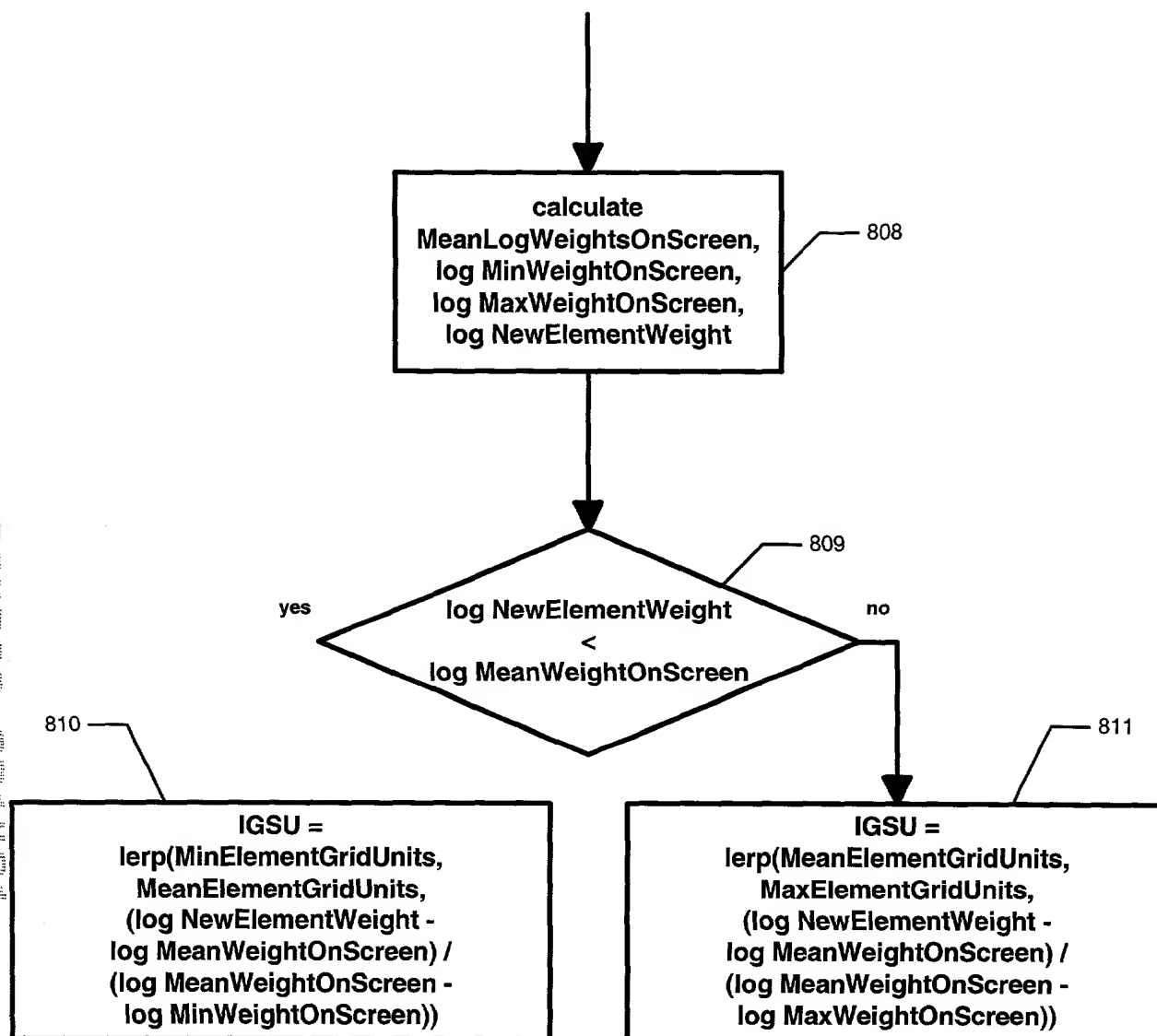


FIG 8b. Adaptive Algorithm to Choose the Initial Size in Grid Units (ISGU) for a New Element to be Place in the Collage Visualization Grid, continued.

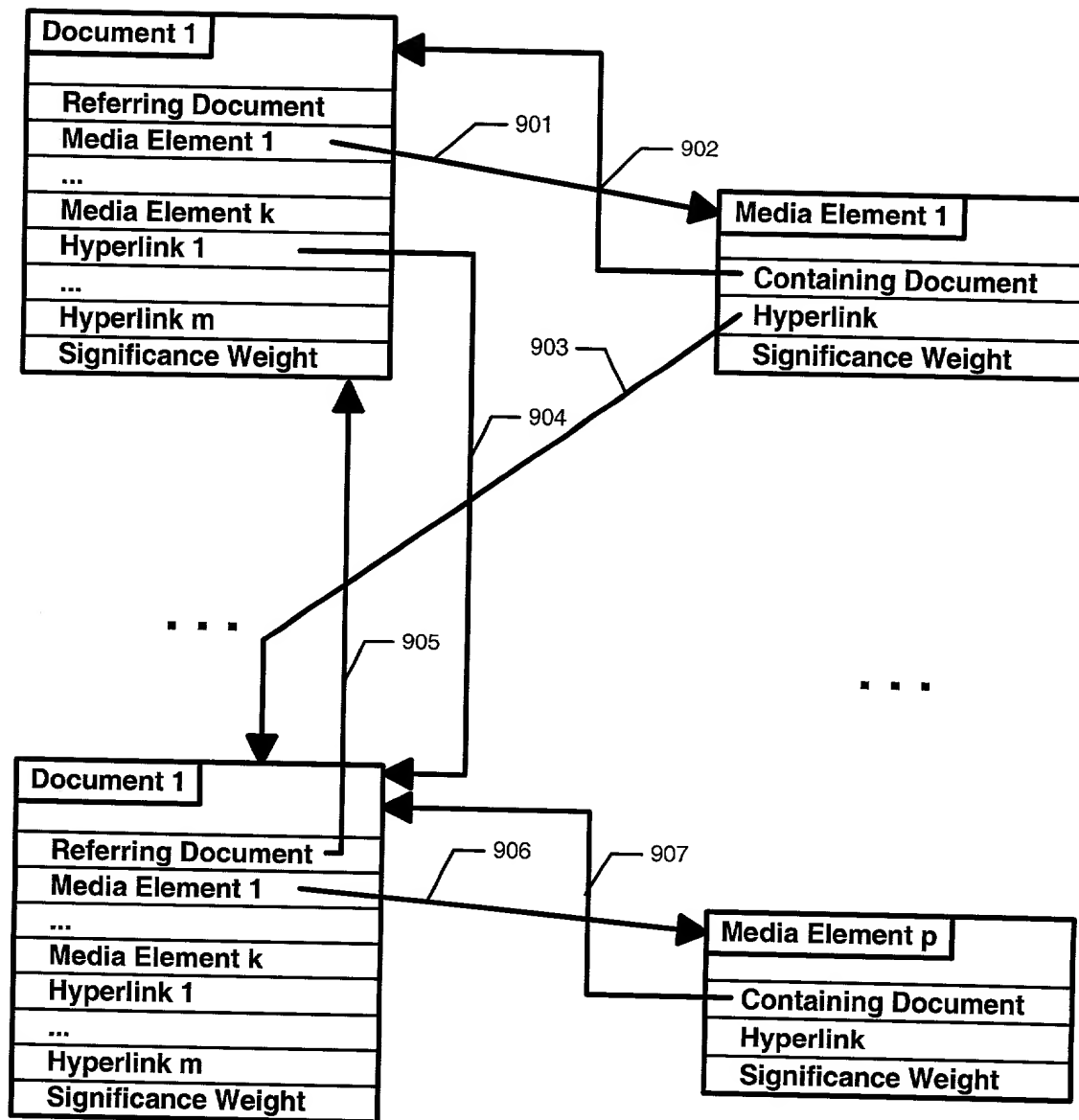


FIG 9. Agent Referential Structure includes the Document Component Store and Significance Weights.